

**CLAIMS**

1. A distributed processing system for use in a wireless communication system, the distributed processing system comprising:  
5 at least one transceiver for providing a wireless connection to other wireless communications devices;  
a first portion of a processing stack coupled to the transceiver;  
a second portion of the processing stack positioned at a location remote to the transceiver; and,  
10 a communication link for interconnecting the first and second portions of the processing stack.
2. A system according to claim 1, wherein the first and second portions of the processing stack are coupled to the communications link via first and second  
15 TCP/IP stacks respectively, the communications link operating to transfer data in a TCP/IP format.
3. A system according to claim 2, wherein the system is adapted to operate a number of transceivers, each transceiver being coupled to a respective first  
20 processing stack portion.
4. A system according to claim 3, wherein a respective first TCP/IP stack is coupled to each first processing stack portion, the second TCP/IP stack being adapted to provide a virtual connection to each first TCP/IP stack.  
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5. A system according to claim 4, wherein the first TCP/IP stacks are coupled to the second TCP/IP stack in series.
6. A system according to any of the preceding claims, wherein the  
30 communications link is an Ethernet connection.
7. A system according to any of the preceding claims, the system further comprising a processor coupled to the second Bluetooth stack portion, the processor being adapted to control the transfer of data via the Bluetooth piconet(s).

8. A system according to any of the preceding claims, a power supply being provided at the remote location, the communications link being adapted to transfer power from the power supply to the at least one piconet and the first portion of the processing stack.

9. A system according to any of the preceding claims, wherein the wireless communications system is a Bluetooth system, the wireless connections being Bluetooth connections and the first and second portions of the processing stack comprising first and second portions of a Bluetooth stack.

10. A system according to claim 9, wherein the first and second portions of the Bluetooth stack are split at the HCI layer such that control commands to be transferred via the communication link are generated in the HCI format.

11. A network node for use in a communications network, the communications network being adapted to communicate with a communications device via a wireless connection, the network node including:

at least one transceiver for communicating with a wireless communications device;

a first portion of a processing stack coupled to the transceiver; and, a port for coupling the network node to a network server via a communications link, the network server including a second portion of the processing stack located remotely to the transceiver.

12. A network node according to claim 11, the node being adapted to communicate via a Bluetooth connection, the first and second portions of the processing stack comprising first and second portions of a Bluetooth stack.

13. A network server for use in a communications network, the communications network being adapted to communicate with a communications device via a wireless connection, the network server including:

a port for coupling the network server to a network node via a communications link, the network node including at least one transceiver for

communicating with a wireless communications device and a first portion of a processing stack coupled to the piconet; and, a second portion of the processing stack coupled to the port for communicating with the first portion via the communications link.

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14. A network server according to claim 13, the server being adapted to communicate via a Bluetooth connection, the first and second portions of the processing stack comprising first and second portions of a Bluetooth stack.

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15. A communications network including a network node according to claim 11 or claim 12 coupled to a network server according to claim 13 or claim 14 via a communications link.

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16. A communications network according to claim 15, wherein the communications network includes a number of network nodes coupled to the network server in series.

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17. A communications network according to claim 15 or claim 16, wherein a power supply is provided at the network server, the power supply cooperating with the communications link to transfer power to the network node(s).

18. A communications network according to any of claims 15 to 17, the network server and network node(s) forming a wireless communications system having a distributed processing system according to any of claims 1 to 10.